

Assigned DOGM File No.: S 0470099  
DOGM Lead: Jan Morse  
Permit Fee \$ 150<sup>00</sup> Ck # 1678

Task ID # 2253

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF OIL, GAS AND MINING**  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291 Fax: (801) 359-3940

**NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS**

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program.

"Small Mining Operations" mining operations which have a disturbed area of five or less surface acres at any time.

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**I. GENERAL INFORMATION (Rule R647-3-104)**

1. Name of Mine: RLR Site #9
2. Legal name of entity (or individual) for whom the permit is being requested: Red Leaf Resources, Inc.  
Mailing Address: 6985 Union Park Center, Suite 375  
City, State, Zip: Cottonwood Heights, Utah 84047  
Phone: 801-878-8100 Fax: 801-878-8101  
E-mail Address: jpatten@ecoshale.com  
Type of Business: Corporation (X) LLC ( ) Sole Proprietorship (dba) ( )  
Partnership ( ) General \_\_\_\_\_ or limited \_\_\_\_\_  
Or:  
Individual ( )

**Entity must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) [www.commerce.utah.gov](http://www.commerce.utah.gov).**

Are you currently registered to do business in the State of Utah? X Yes No

Entity # 6542120-0143

If no, contact [www.commerce.utah.gov](http://www.commerce.utah.gov) to renew or apply.

Local Business License # (if required)

Issued by: County \_\_\_\_\_ or City \_\_\_\_\_

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3.

**Contact Person(s)**

Name: Dr. James W. Patten Title: CEO  
Address: 6985 Union Park Center, Suite 375  
City, State, Zip: Cottonwood Heights, Utah 84047  
Phone: 801-878-8100 Fax: 801-878-8101  
Emergency, Weekend, or Holiday Phone: \_\_\_\_\_  
E-mail Address: jpatten@ecoshale.com

**Contact person to be notified for: permitting (X) surety (X) Notices (X) (please check all that apply)**

Name: Same as above Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Emergency, Weekend, or Holiday Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**Contact person to be notified for: permitting ( ) surety ( ) Notices ( ) (please check all that apply)**

Registered Utah Agent (as identified with the Utah Department of Commerce) (if individual leave blank):

Name: Todd Dana  
Address: Same as above  
City, State, Zip: \_\_\_\_\_  
Phone: 801-878-8100 Fax: 801-878-8101  
E-mail Address: td@ecoshale.com

**Other**

Name: Laura Nelson  
Address: Same as Above  
City, State, Zip: \_\_\_\_\_  
Phone: 801-878-8105 Fax: 801-878-8101  
Email: lnelson@ecoshale.com

4.

**If Business is a: Sole Proprietor:**

**Sole Proprietor:**

Name of Owner: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**If Business is a Corporation:**

**Name of Officers:**

Dr. James W. Patten Title: President, CEO  
Todd Dana Title: Chairman, COO \_\_\_\_\_  
\_\_\_\_\_  
Title: \_\_\_\_\_  
Title: \_\_\_\_\_

Headquarters Address: 6985 Union Park Center, Suite 375  
City, State, Zip: Cottonwood Heights, Utah 84047  
Headquarters Phone: 801-878-8100 Fax: 801-878-8101  
E-mail Address: jpatten@ecoshale.com

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**If Business is a Limited Liability Company:** Member Managed ( ) Manager Managed ( )

**Name of 1st Member/Manager:** Title:

**Business Address:**

City, State, Zip:

Phone: Fax:

E-mail Address:

**Name of 2nd Member/Manager:**

**Business Address:**

City, State, Zip:

Phone: Fax:

E-mail Address:

**If Business is a Partnership:**

**Name of Partner:**

**Business Address:**

City, State, Zip:

Phone: Fax:

E-mail Address:

**5. Ownership of Land Surface:**

Private (Fee) ( ) Public Domain (BLM) ( ) National Forest (USFS) ( )

State Trust Land/School Sections (X) State Sovereign Lands ( )

Other (please describe): \_\_\_\_\_

Name Address

Name Address

Name Address

**6. Ownership of Minerals:**

Private (Fee) ( ) Public Domain (BLM) ( ) National Forest (USFS) ( )

State Trust Land/School Sections (X) State Sovereign Lands ( )

Other (please describe): \_\_\_\_\_

Name Address

Name Address

Name Address

BLM Lease or Project File Number(s) and/or USFS assigned Project Number(s):

BLM Claim Number(s):

Utah State Lease Number(s): 50293

Name of Lessee(s): Red Lead Resources, Inc.

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**7. Have the above surface and mineral owners been notified in writing?**

Yes (X) No ( )

If no, why not?

*Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of*

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4. **Will any water, liquid chemicals, reagents, or other solutions be used, produced or discharged as part of the mining or milling process?**  
Yes ( ) No ( X ) If yes, please describe (add extra pages if needed)
5. **Provide a brief description of the proposed mining operation and onsite processing facilities** (add extra pages if necessary). **ATTACHED**
6. ( ) **New Road(s):** Length (ft)\_\_\_\_\_ Width (ft)\_\_\_\_\_
7. (X) **Improved Road(s):** Provide a description of the improvements that need to be made to existing roads to access the site, including the Length (ft) and Width (ft) of improvements.  
Existing Road: Agency Draw Road  
Length (ft)\_\_\_\_\_40\_\_\_\_\_ Width (ft)\_\_\_\_\_25\_\_\_\_\_
8. **Total project surface acreage to be disturbed: (5 acres) PLEASE SPECIFY EXACT ACREAGE - (this will be used to determine surety bond amount – see #VI).**
9. **Proposed startup date of project** (month, year):\_\_\_\_\_ May 2008
10. **Proposed completion date of project, if known** (month, year)\_\_\_ November 2012

#### **IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)**

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at [www.ogm.utah.gov](http://www.ogm.utah.gov).

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities so as to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*

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11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.

12. Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.

13. Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)

14. Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.

**V. VARIANCE REQUEST (Rule R647-3-110)**

**Any variance request must be approved in writing by the Division**

Yes ( ) No (X)

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see **IV. Operation and Reclamation Practices** Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measure to be utilized. A variance shall be granted if the alternative method or measure proposed will be consistent with the Act.

**1st Variance Requested**

Item # \_\_\_\_\_ Applicable Rule # (i.e. R647-3-109.10 (if you did not want trenches & pits reclaimed)) \_\_\_\_\_  
Justification: \_\_\_\_\_  
Alternate methods or measure to be utilized: \_\_\_\_\_

**2nd Variance Requested**

Item # \_\_\_\_\_ Applicable Rule # \_\_\_\_\_  
Justification: \_\_\_\_\_  
Alternate methods or measure to be utilized: \_\_\_\_\_

**3rd Variance Requested**

Item # \_\_\_\_\_ Applicable Rule # \_\_\_\_\_  
Justification: \_\_\_\_\_  
Alternate methods or measure to be utilized: \_\_\_\_\_  
**Attach additional page if more variances are requested.**

**VI. SURETY (Act 40-8-7(1)[c])**

**A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations.**

The Utah Mined Land Reclamation Act (40-8-7 (1)[c] and 40-8-14 provides the authority that all mining operations furnish and maintain reasonable surety to guarantee that the land affected is reclaimed.

The surety amount is based on the nature, extent and duration of operations. *The surety amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions.*

Surety for small mines sites will be escalated three (3) years to the future.  
Contact the Division for dollar amount required for this project.

*JP*  
I will provide surety in the form of a: Certificate of Deposit, Letter of Credit, Surety Bond, Cash (certified funds), or Division Approved form.

**VII. PERMIT FEE [Mined Land Reclamation Act 40-8-7(1)(i)]**

The Utah Mined Land Reclamation Act of 1975 [40-8-7(1)(i)] provides the authority for the assessment of permitting fees. Commencing with the 1998 fiscal year (July 1 - June 30), permit fees are assessed to new and existing notices of intention, and annually thereafter, until the project disturbances are successfully reclaimed by the Permittee / Operator and released by the Division.

***Small Mine Notices require a \$150.00 fee which must accompany this application or it cannot be processed by the Division.***

**VIII. SIGNATURE REQUIREMENT**

**(Please check the box if applicable and place your initials on the line provided)**

*JP* ☒ I have enclosed the required permit fee.

*JP* I understand that I am not authorized to create any surface disturbance until the surety amount is posted and approved in writing from the Division of Oil, Gas and Mining and any other authorized regulatory agency.

**CERTIFICATION**

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

*JP* a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND

*JP* b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.

*JP* c. **This certification must be executed by an executive officer if the applicant is a corporation; by a partner if applicant is a partnership (general or limited); owner if applicant is a sole proprietorship; member or manager if applicant is a limited liability company.**

Signature: *James W. Patten* Date: 2/22/08

Name (typed or printed): Dr. James Patten,

Title/Position (if applicable): President & CEO

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9. To the best of Red Leaf's understanding and site review, there appear to be no pre-existing, un-reclaimed, surface or underground mining disturbances located on the site.
10. Red Leaf has identified a 5 acre disturbance on the site. The proposed area for mining is 3 acres, comprised of two excavation areas each 1.5 acres in size. Excavations will not be done simultaneously. The first 1.5 acre excavation will be prepared, lined with an impermeable barrier, fitted with metal pipes and the ore deliberately place back in the impound. The liner will be placed over the top of the mound and the overburden replaced and reseeded. This process of excavation and replacement will take approximately 90 days. Three (3) acres of the area will be used to store the shale and overburden during the construction phase. Once the first cell is completed the second excavation will be initiated with the displaced overburden and mined shale similarly stored on the remaining acres. Once pits are completed, there is no further need to excavate on the site. The areas identified are inclusive of all areas needed for equipment, staging, stockpiling, processing, and structures on site.
11. RLR will drill one core hole within the 5 acre site (reference Figure 2, Site 9).
12. On site gas burners used for heating will be on skids and removable at the end of the operations. No permanent structures will be erected.
13. Figure 2.0 Site 9 shows the exploration site and the proposed area of disturbance for the capsule construction. This location is inclusive of equipment. Figure 3.0 Site 9 depicts a generic site arrangement.
14. Red Leaf is currently conducting an exploration project, Southwest #1, in accordance with its permit for Exploration and Reclamation issued October 24, 2007. As part of that process, Red Leaf will be identifying appropriate markets, haul routes, production targets, sales prices and potential for annual sales. Once collected, this data will be provided to the Division of Oil Gas and Mining.
15. Exact tonnage and volume on the site will de determined based on ore density at the site and reported to the Division of Oil Gas and Mining.
16. Red Leaf Resources will conduct reclamation consistent R647-3-109.

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*(this includes two  
maps!)*



